

Environmental Protection Agency

IL-0123-09

2200 Churchill Road, Springfield, Illinois 62706

— ORIGINAL —

Waste
Check if
Applicable

APPLICATION FOR PERMIT
TO DEVELOP A SOLID WASTE
MANAGEMENT SITE

☒ Storage
☐ Transfer
☐ Processing
☐ Recovery
☐ Incineration
☐ Other

In Accordance With The Environmental Protection Act

All information submitted as part of the Application is available to the public except when specifically designated by the Applicant to be treated confidentially as regarding a trade secret or secret process in accordance with Section 7(a) of the Environmental Protection Act.

RECEIVED

APPLICATION MUST BE SUBMITTED IN DUPLICATE

NOV 21 1980

PART I - APPLICANT INFORMATION

E.P.A. - D.L.P.C.
STATE OF ILLINOIS

A. Site Identification

Richard L. Cline, Secretary
1. Name of Applicant Lemont Mfg. Co. Div. of The Ceco Corp.
(Person responsible for operation)

2. Address of Applicant Box 280
(Street, P.O. Box, or R. R. #)

Lemont Illinois 60439
City State Zip Code

Telephone: 312 257-7701
(Area Code) (Number)

3. Name of Land Owner Same
(If same as above, so indicate)

4. Address of Land Owner Same
(Street, P.O. Box, or R. R. #)

City State Zip Code

Notification Sent
Per I. E. P. A. Act §39 (c)

STPR 5/15/79
LPC-7 Rev. 5/79

NOV 26 1980

EPA Region 5 Records Ctr.



300758

DL/NPC

5. Name of Site Lemont Mfg. Co. Div. of The Ceco Corp. Scrap Yard

6. Address of Site New Avenue
(Street, P.O. Box, or R. R. #)

Lemont Illinois 60439
City State Zip Code

Will County Will Township

7. Land ownership (Check Applicable Boxes)

☒ Presently Owned by Applicant ☐ To be Leased by Applicant For Years

☐ To Be Purchased by Applicant ☐ Years of Lease Remaining:
Termination date of lease

Operated by: Ill. Corporation ☐ Partnership ☐ Government ☐
Individual ☐ Other ☐

B. SITE BACKGROUND (Check Applicable Box or Boxes)

8. ☒ This is an existing operation begun June (mo.) 1972 (yr.) (approx.)

☐ this is a proposed operation.

☐ This is a proposed extension of an existing adjacent operation:

Illinois E.P.A. Permit No. :

☒ No Illinois E.P.A. Permit.

PART II - LOCATION INFORMATION

A. ZONING AND LOCAL REQUIREMENTS

9. Present zoning classification of site Landfill

10. Does present zoning of site allow the ^{existing}~~proposed~~ usage?
☒ Yes ☐ No.

11. Restrictions (if any) None - Presently

12. Check applicable boxes which describe the use of adjacent properties surrounding site.

	Residential	Commercial	Industrial	Agricultural	Others*
a. North	()	()	(X)	()	()
b. East	(X)	()	()	()	(X) (Mining)
c. South	()	()	(X)	()	()
d. West	()	()	(X)	()	()

*SPECIFY USE CLASSIFICATION _____

13. a. Are there any permits, operational requirements, licenses, or other requirements or restrictions by any municipality, planning commission, county, county health department, state agency, or other governing body?
(X) Yes () No If yes, List below. "Landfill" Permit by

Will County

- b. Have these requirements, licenses or restrictions been approved by the agency or governing body having jurisdiction?
(X) Yes () No

- c. If the answer to (b) is yes, include photocopies of supporting documents. Enclosure - Landfill Permit (Attachment #1)

B. LOCATION

14. Attach a copy of the United States Geologic Survey (U.S.G.S.) topographic quadrangle map of the area which contains the site. (7.5 minute quadrangle, if published).

Quadrangle Map Provided: Romeoville, Illinois 1962
NE/4 Joliet 15' Quad. 1973 (Photo Revised)
Name Date

15. a. Outline on the U.S.G.S. topographic quadrangle map the location and extent of the site. See Map (Attachment #2)
- b. Provide a legal description of the site. (Typewritten on attached sheet.)

approx. 1/6 acre

of approx. 9 Acres in NE Quarter, Quarter, Quarter,
of Section 25, Township 37N,
Range 10E, East of 3rd P.M.

16. General characteristic: (Flood Plain, Hillside, Field, Strip Mine, Quarry, Gully, Gravel Pit, Swamp, etc.)

Briefly describe: Quarry

17. Plot the following information on the U.S.G.S. quadrangle topographic map, if within the site or adjacent to the outer perimeter of facility:

- a. Wells (domestic, industrial, etc.) - 3 homes & on-site well
- b. Public water sources (wells, stream, etc.) - I&M Canal
- c. Residences or residential areas, commercial facilities, sewage treatment facilities, industries, institutions, etc.
- d. Other treatment facilities not shown on topographic map such as diverted steams, strip mines, ponds, etc.

If scale of quadrangle map is not sufficient, show the above items on a separate topographic map (See Part IV - A - 23).

PART III - SITE CHARACTERISTICS

To Be Completed If Land Disposal Of Waste On Site Is Requested

NOT REQUIRED -
STORAGE ONLY

A. GEOLOGY - HYDROLOGY

NOTE: The instructions for this Part of the Application should be read carefully prior to initiating the data-gathering program for the site.

Provide subsurface information in comprehensive detail, sufficient to allow thorough evaluation of the hydrologic and geologic conditions beneath and surrounding the site. This data must fully describe the hydrogeologic interrelationships of the landfill facility, local ground waters, and surface waters. All information requested in sections 18 through 22 should be integrated and presented as a detailed hydrogeologic report.

B. GEOLOGY

GENERAL GEOLOGIC SETTING

18. Provide a brief description of the general geography of the region in which the site is located, and a summary of the hydrogeologic conditions typical of that portion of Illinois.
- 1. Sand bluffs to the SE of New Ave. (Area B)
 - 2. Shale (dolomite) quarried area underlies scrap yard & dust pit.

TYPE AND EXTENT OF SUBSURFACE MATERIALS

19. Provide a complete log (description) of each boring made during the exploratory program, and include all other pertinent data so obtained. Shale to at least -50' (i.e. elev. approx. 536) - Attachment #3 - ~~Exhibit~~ Exhibit
20. Include the following information regarding the bedrock, if #3 encountered during the boring program:
 - a. Depth(s) to bedrock. approx. 0'
 - b. Lithology (physical character) and hydrologic characteristics of the bedrock formation. Limestone typical
 - c. Name and age of the formations encountered during the boring operation and (or) which crop out on or adjacent to the site. Limestone underlies entire area

C. MATERIALS CLASSIFICATION AND ANALYSIS

21. Provide the following information for samples taken during the boring operation: Typical of Limestone
 - a. textural classification (U.S.D.A. system)
 - b. particle size distribution curves for representative samples
 - c. coefficient of permeability - based on field and (or) laboratory determinations
 - d. ion-exchange capacity and ability to absorb and "fix" heavy metal ions

D. HYDROLOGY

22. Provide the following information regarding the hydrologic flow system in the area of the site:
 - a. Depth to water in boreholes at time of boring completion and periodic measurements until the water level has stabilized. Water elevation is at approx. -0' (i.e. elev. approx. 586)
 - b. Rate(s) and direction(s) of ground-water movement. Rate is unknown, but direction is toward WNW - Attachment #4
 - c. A narrative description (with diagrams) of the design and installation procedures for all piezometers installed at the site. This shall include both water-level measuring piezometers and those installed for permanent use as water-quality monitoring points. - See drawing of test wells. Attachment #3
 - d. An analysis of the background ground-water quality, as per those constituents listed in the Instructions. Attach a copy of the laboratory report. See Table III - Groundwater Analysis -
 - e. An outline of the procedures, devices, and personnel to be employed for the collection of periodic ground-water samples from the monitoring point(s) installed at the site. Attachment #5

Samples were taken on 4/21-23/80 and will be taken again in 1981 during the same period.

PART IV - CONSTRUCTION PLANS
AND SPECIFICATIONS

A. SITE DEVELOPMENT PLAN

23. Provide a detailed topographic map of the existing site (Scale 1" = 200' or larger) showing 5-foot contour intervals on sites (or portions thereof) where the relief exceeds 20 feet, and 2-foot contour intervals on sites (or portions thereof) having less than 20 feet of relief. This map should show all buildings, ponds, streams, wooded areas, bedrock outcrops, underground and overhead utilities, roads, fences, culverts, drainage ditches, drain tiles, easements, streets, any other item of significance, including legal boundaries. Detailed survey not available at this time - drawing of available information attached. (Attachment #2)
Show the location and elevation of borings as described in Part III - 19, 20. See Table IV, V and Exhibit 2 (Attachment #6)
24. Provide a separate map, at the same scale as that above, of the developed site showing the following:
- a. All changes in topography dictated by design and operational factors. Area is essentially filled to approx. +595 with scrap material
 - b. All surface features (as specified in IV - A - 23) both unaltered and modified, and installed as part of the facility. This shall include all new construction with location plans for berms, dikes, dams, earth barriers, surface drainage ditches, drainage devices, (culverts, tiles), fencing, access roads, entrance(s), utilities, buildings, sanitary facilities, monitoring well(s), streams, ponds, mines, and any other special construction as may be required to comply with the provisions of the Rules and Regulations. Detailed survey not available as yet. Dust pits are bermed to approx. +595.
 - c. Earth barriers, berms, dikes and other barriers, including essential dimensions of each. Open drainage ditch crosses property (emptying into I&M canal & it is bermed on either side).
25. Provide a topographic map of the closed and covered site showing final contours, with an interval of 5 feet if relief is greater than 20 feet, and intervals of 2 feet if relief is less than 20 feet. Topo not available at this time.
26. Provide plan views (Scale 1" = 200') and cross sections of the leachate collection and treatment system, if utilized, including the following information: Not utilized.
- a. Type, location and construction of subsurface collection system, and all attendant devices.
 - b. Location, dimensions, volume, and surface elevation of treatment lagoon(s), if used.
 - c. Detailed written narrative of the method and processes of the treatment system, and program for monitoring the performance and effectiveness of the treatment system.
 - d. Discharge point(s) of effluent.

B. SCHEDULE OF CONSTRUCTION

27. Attach a typewritten narrative supplemented by indications on the plans of the sequence of areas to be developed. Estimate the date of beginning and ending of each phase of construction and operation. The existing west pit is filled and has an approx. 6' berm above its fill level. The east pit is being filled until Nov. 19th. Both will

C. CONSTRUCTION REQUIREMENTS be dug out and material hauled to a secure landfill.

28. Attach a typewritten narrative supplemented by indications on the plans of provisions to be made for:

- a. Prevention of surface-water pollution.- Pit areas are bermed.
- b. Control of gas migration. - Not applicable - the waste is inorganic.
- c. Elimination of flood hazard, if any.- Not applicable
- d. Employee facilities. - Normal
- f. Measuring quantity of waste delivered to the site.
None after Nov. 19, 1980. Previously approx. 15-20 yd³/week.

PART V - OPERATING PLAN

A. SOURCE AND VOLUME

29. Indicate the estimated quantity of each of the following sources and types of waste the facility will handle during each day of operations; each week of operation; each year of operation. Specify any additional information regarding refuse source and quantity. No input after Nov. 19, 1980.

<u>SOURCE</u>	<u>TYPE</u>	<u>DAILY QUAN.</u>	<u>WEEKLY QUAN.</u>	<u>ANNUAL QUAN.</u>
a. Residential	_____	_____	_____	_____
b. Commercial	_____	_____	_____	_____
c. Industrial	_____	_____	_____	_____
d. Agricultural	_____	_____	_____	_____
e. Other (Describe)	_____	_____	_____	_____

B. OPERATING REQUIREMENTS

30. Attach a typewritten description of provisions for:
- a. Personnel for supervision and operation
 - b. Traffic control

Operation after Nov. 19th will consist of removing material from first the west and then the east pit. Trucks will be loaded by owner's agents and hauled to a secure landfill.

- c. Designation of unloading area
- d. Dust control
- e. Odor control
- f. Management of surface water
- g. Erosion control
- h. Monitoring program for gas
- i. Reuse and recycling operations

31. Provide a list of equipment to be used for the operation:

ITEMS	MODEL NUMBER	NO. OF UNITS IN OPERATION	DESCRIPTION
-------	--------------	------------------------------	-------------

Heavy dozers and/or drag bucket filling trucks.

PART VI - NOTICE / LAND USE

32. In order that notice of intent be sent to those affected by this application, you shall provide these names and addresses to the Agency:

- a) State's Attorney of the county in which the site is located. S.A. Edward Petka
- b) Chairman of the County Board of the county in which the site is located. Will County - Ted Grabavoy
- c) Each member of the General Assembly from the Legislative district in which the site is located. (Three Representatives, One Senator) George Songmeister, Harry Leinweber, Jack Davis and Leroy Van Duyne

- d) The clerk of each municipality, any portion of which is within three miles of the site. Romeoville (Will County) Richard Kanak & Lemont (Cook County) Perle Mentch
- e) Adjacent landowners to the proposed site. Unknown County) Perle Mentch
- f) Local zoning and planning agencies. Will County P&Z and Cook County P&Z

33. Provide the following documentary evidence sufficient to show:

- a) That the facility is located so as to minimize scenic blight, and to avoid damage to archaeological and/or historic sites and areas of significant natural beauty; Site is in industrial (heavy) area and and bermed from New Ave. No archaeological or historic sites are known to exist
- b) That the facility is located so as to avoid any hazards to other than the public health and safety and to minimize any offenses to the I&M Canal. senses of persons residing, working, traveling, and/or in any way spending periods of time in the immediate vicinity. Immediate vicinity is here defined to mean a one-mile radius zone adjacent to the boundary of the site; The site is fenced and gated and bermed.
- c) Taking into consideration the character of the area involved, including the character of surrounding land uses and the trend of development, as well as local comprehensive plans and zoning ordinances, that the facility is located so as to minimize incompatibility with the character of the surrounding area. Facility is in a heavy industrial area.
- d) That the facility is located so as to avoid causing substantial depreciation of nearby property (taking into consideration, where possible, any mitigation caused by the short proposed life of the site and end use); Site is a scrap steel yard in a heavily industrialized area.
- e) That any detriments caused by removal of the site from its former use are out-weighed by the need in the area for such a facility at this location; Former use was as a quarry. Present use is a scrap reclaim yard and scrap storage yard for Ceco Steel.
- f) That the facility is located so as to avoid a continued adverse effect on existing air and water quality; and Monitoring water wells do not show any groundwater pollution despite approx. 8 years of operations.
- g) Taking into consideration geological and hydrological factors, the location of the site in relating to sources of solid waste and accessibility to transportation modes, and the technical feasibility and economic reasonableness of disposing of solid waste at the proposed location, that the facility is suited for its intended use. The site is a reclaim and storage yard for steel scrap.
- h) That access roads and bridges are not limited to preclude necessary vehicular traffic (i.e. proposed size and weight limits). Access road off New Ave. is for industrial use only.

I hereby affirm that all information contained in this Application is true and accurate to the best of my knowledge and belief.

Signature of Applicant: *Paul H. Allen* 11/19/80
Date

Attest: *H.E. Jessen* 11/19/80
Date

Signature of Engineer: *James F. Kahle* 11/19/80
James F. Kahle Date

Illinois Reg. No: 62-32947

Witness: *Nancy L. Wain* 11/19/80
Date

Signature of Landowner(s): *Paul H. Allen* 11/19/80
Date

Attest: *H.E. Jessen* 11/19/80
Date

Engineer (Seal)

Signature of other person, technical and non-technical, who has supplied data contained in the submittal.

Signature Date

Reg. No., Position, Title, Etc.

Engineer (Seal)

Signature Date

Reg. No., Position, Title, Etc.

(Seal)

SAS:b1s/7055A/sp

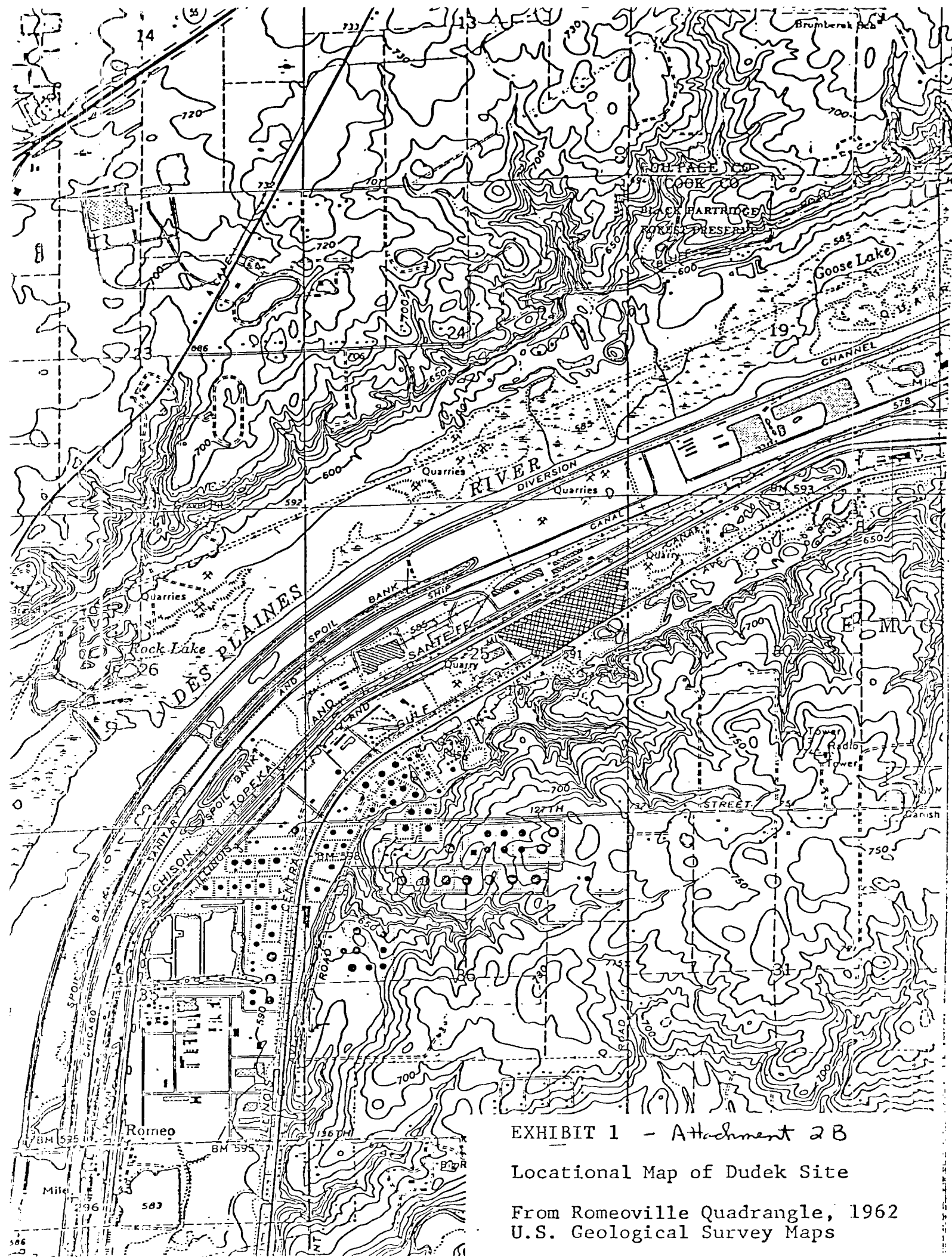
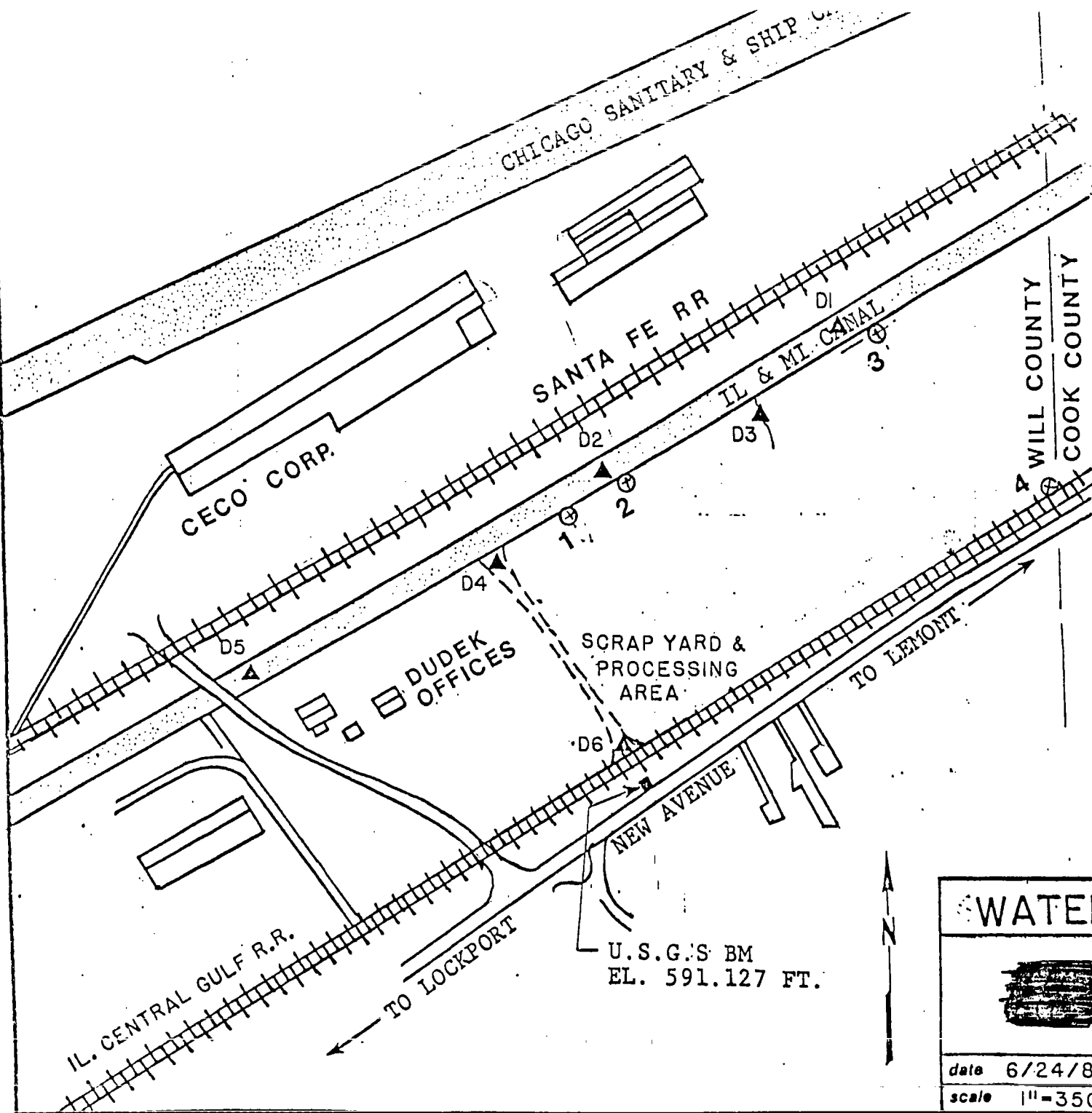


EXHIBIT 1 - Attachment 2 B

Locational Map of Dudek Site

From Romeoville Quadrangle, 1962
U.S. Geological Survey Maps



WELL NO.	RIM ELEV.	GROUND ELEV.
1	595.58	592.91
2	591.95	589.73
3	591.90	589.30
4	592.92	591.50

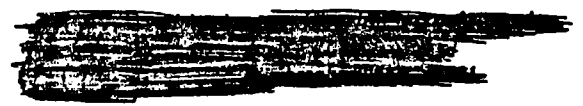
DIRECTION OF GROUND WATER FLOW IN LIMESTONE



⊕ MONITORING WELL

▲ SURFACE WATER SAMPLING POINT

WATER SAMPLING POINTS



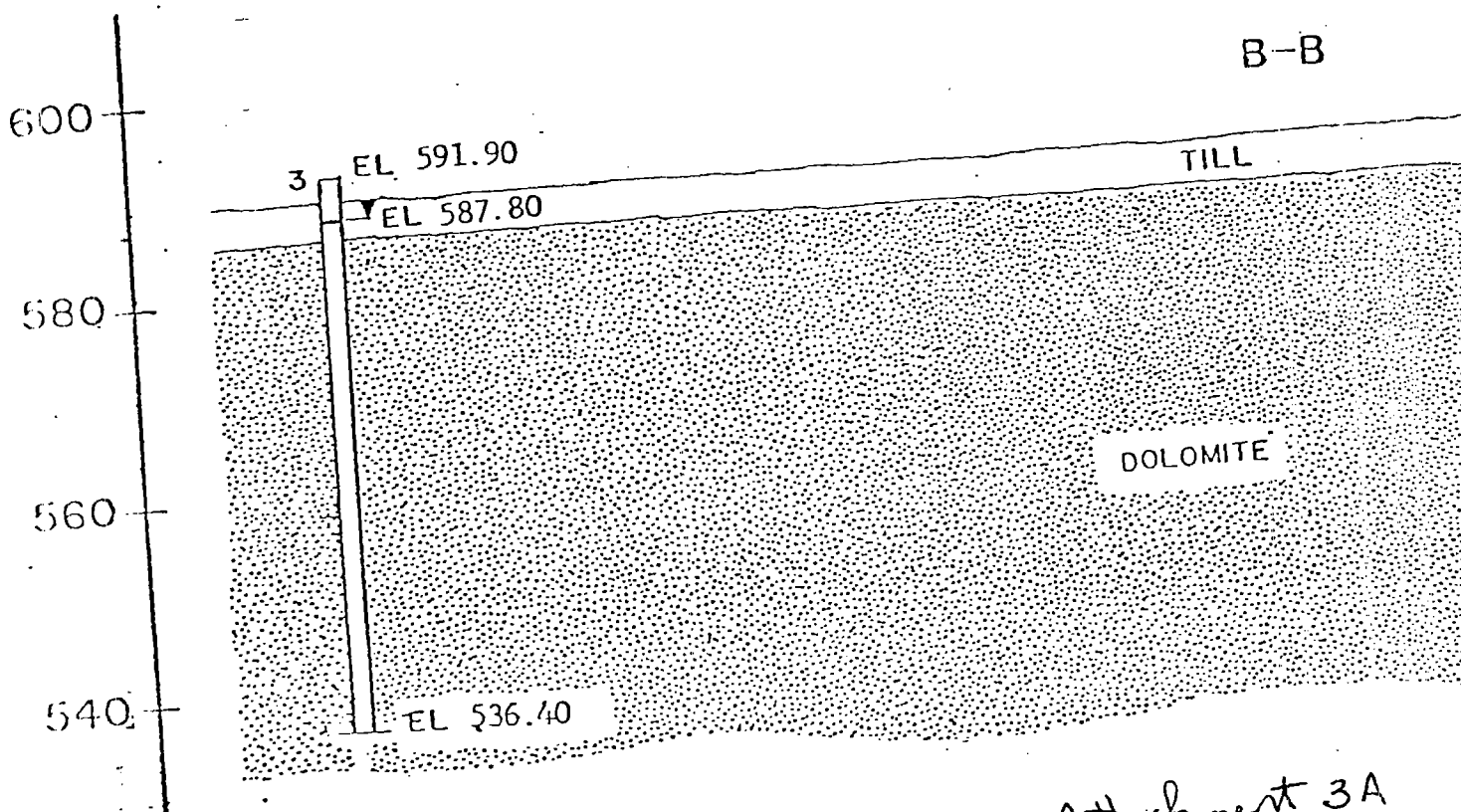
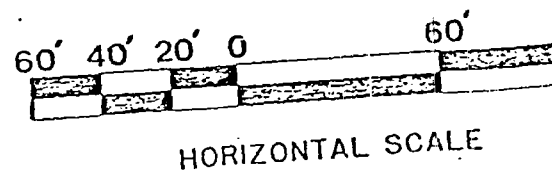
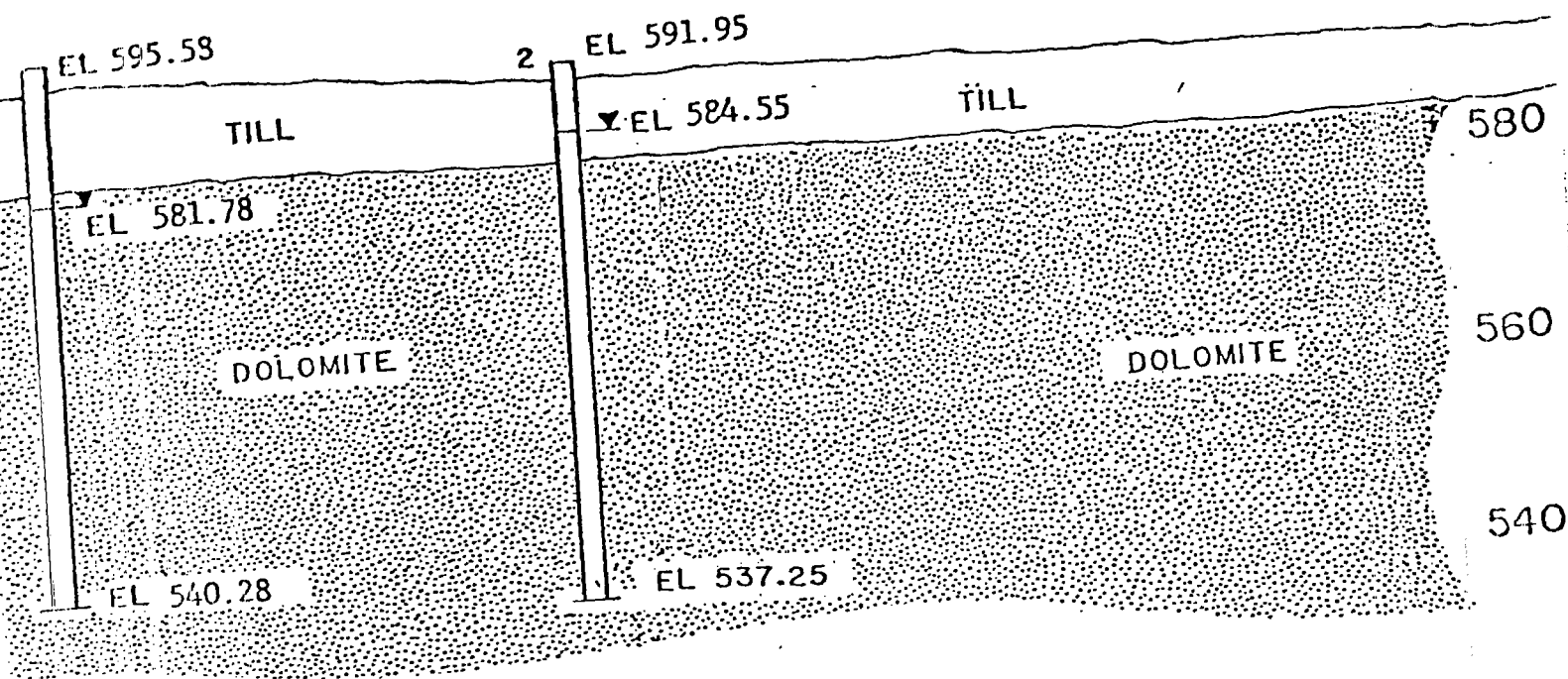
date 6/24/80
scale 1"=350'

EXHIBIT 2

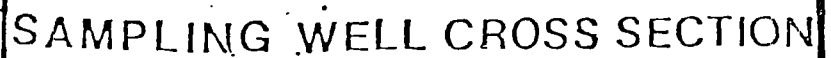
- Attachment 2C -

A-A

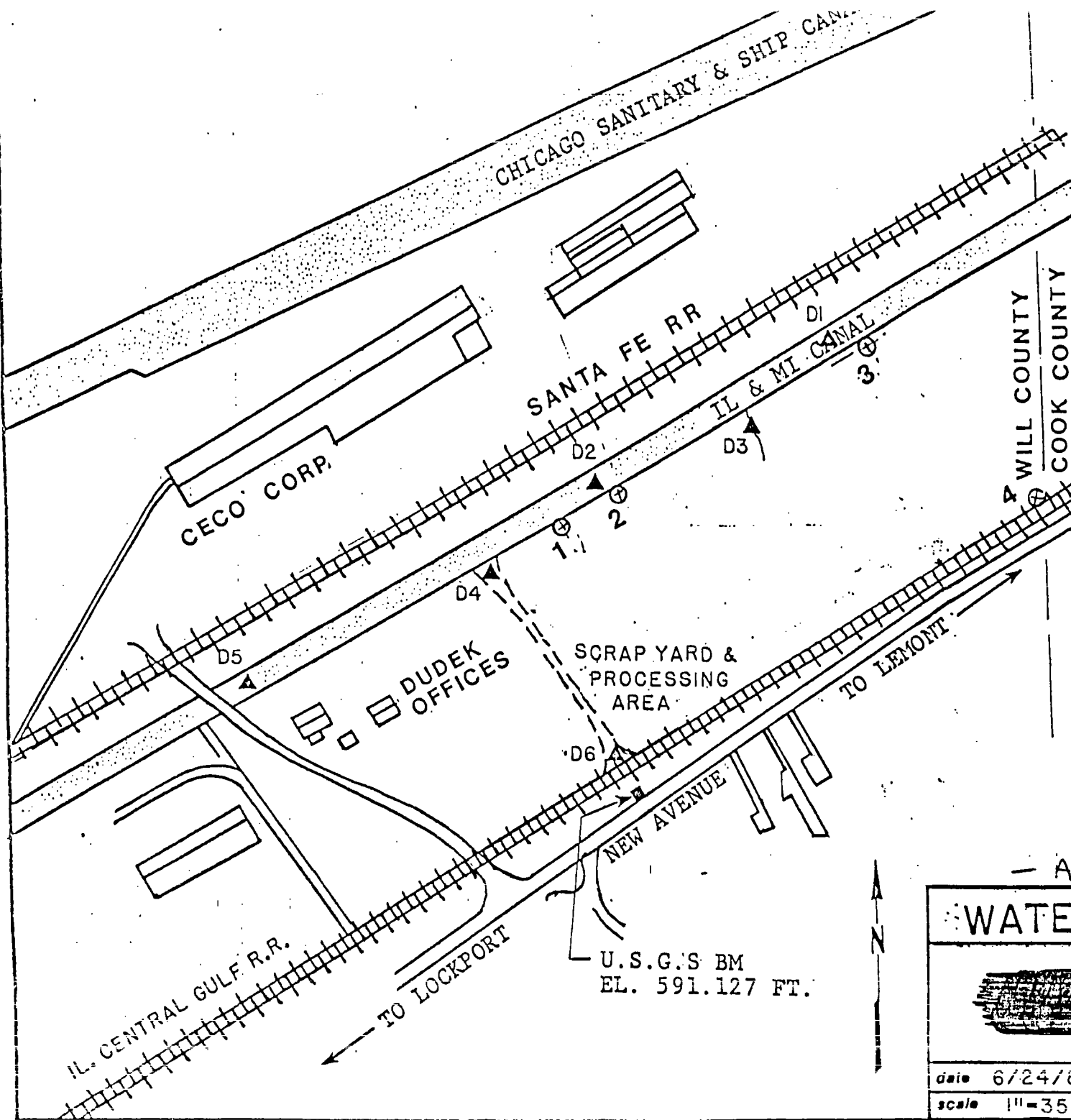
600



Attachment 3A



WEJ.



WELL NO.	RIM ELEV.	GROUND ELEV.
1	595.58	592.91
2	591.95	589.73
3	591.90	589.30
4	592.92	591.50

DIRECTION OF GROUND WATER FLOW IN LIMESTONE

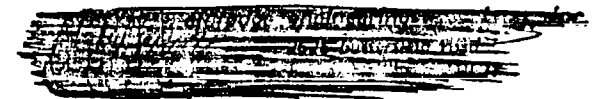


⊕ MONITORING WELL

▲ SURFACE WATER SAMPLING POINT

- Attachment 4 -

WATER SAMPLING POINTS



date 6/24/80

scale 1"=350'

EXHIBIT 2

- Attachment 4B-

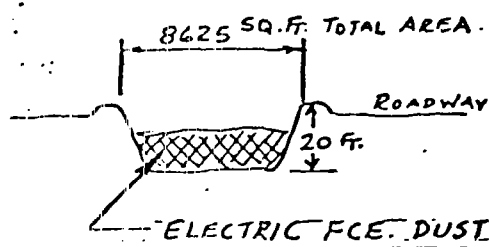
TABLE V - WELL WATER ELEVATIONS

	Initial Water Levels			Water Levels One Hour After Purging		
	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
<u>Well #</u>						
1	581.88	581.78	581.78	576.18	576.18	572.18
2	585.05	584.65	584.85	584.85	585.15	584.75
3	587.20	586.90	587.00	587.50	587.50	587.40
4	587.12	588.02	588.12	587.72	587.82	587.92

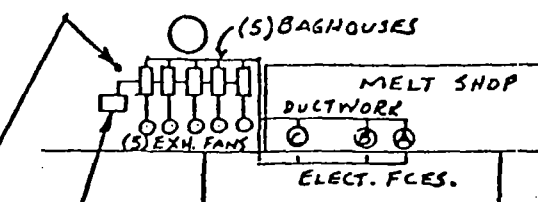
Note: Test Period 4/21/80 - 4/23/80

USGS Elevations in feet

TY DRAWING (see page 4)



ENLARGED TYPICAL SECTION
THRU STORAGE PITS
(2) EXISTING.

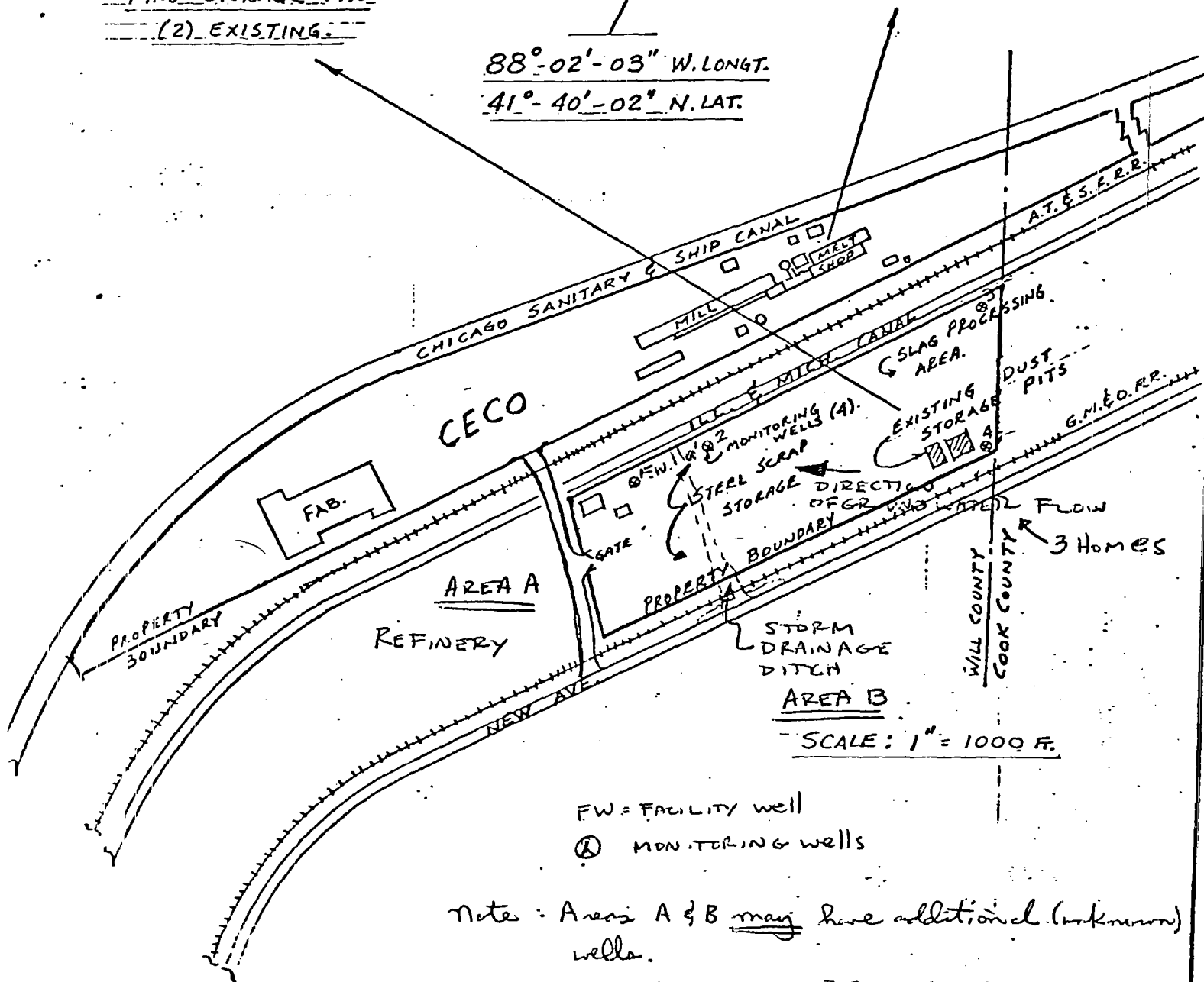


TREATMENT FACILITY
(PELLETIZING OF E.F. DUST)

ENLARGED VIEW

88°-02'-03" W. LONGT.

41°-40'-02" N. LAT.



LEMONT MFG. CO.

THE CECO CORP.

WASTE HANDLING FACILITIES

NOV. 7, 1980 J.F.

TABLE II - BACKGROUND WATER ANALYSIS

	<u>W-1</u>	<u>W-2</u>	<u>W-3</u>	<u>W-4</u>
Total Solids	1086	1004	1116	612
Diss. Solids	932	774	840	434
COD	40	12	4	24
Phenols ug/l	5.50	0.55	<0.55	0.55
Oil & Grease	13	5	7	2
pH @ 25°C	8	7.8	7.9	7.6
Spec. Cond.	1295	1060	1177	589
Alkalinity	340	376	384	216
Total Hardness	608	568	560	332
Bromide	0.50	0.45	0.20	0.40
Chloride	95	24	44	17
Flouride	0.43	0.32	0.35	0.37
Cyanide Total	0.045	0.059	0.042	0.012
Carbonate	0.00	0.00	0.00	0.00
Bicarbonate	340	376	384	216
Selenium	<0.002	<0.002	<0.002	<0.002
Nitrate	0.010	0.025	0.020	0.005
Phosphate	2.23	1.84	2.67	1.49
Sulfate	215	183	227	75
Aluminum	<1.0	<1.0	<1.0	<1.0
Antiomny	<1.0	<1.0	<1.0	<1.0
Arsenic	0.062	0.025	0.053	0.026
Barium	<0.1	<0.1	<0.10	<0.1
Boron	0.35	0.35	0.30	0.30
Cadmium	<0.10	<0.10	<0.10	<0.10
Calcium	158	130	130	86.0
Chrom-Total	<0.1	<0.1	<0.1	<0.1
Chrom-Hex	<0.1	<0.1	<0.1	<0.1
Copper	<0.1	<0.1	<0.1	<0.1
Iron	<0.1	<0.1	<0.1	<0.1
Lead	<0.1	<0.1	<0.1	<0.1
Magnesium	62.0	60.0	59.0	26.0
Manganese	<0.1	<0.10	<0.1	<0.1
Mercury ug/l	0.163	<0.1	0.163	0.163
Nickel	<0.1	<0.1	<0.1	<0.1
Silver	<0.1	<0.1	<0.1	<0.1
Sodium	42	17.0	51.0	5.0
Zinc	<0.1	<0.1	<0.1	<0.1

Dudek Wells No. 1-4 sampled 2/22/80. Laboratory Report 3/4/80.

All values are in ug/l except as otherwise noted.

- Attachment 5B -

TABLE III - GROUNDWATER ANALYSIS

Sample # Parameter	101				102				103				104			
		*	*			*	*		*	*			*	*		
TDS	1200	944	952	1100	860	812	780	760	740	704	776	820	640	620	712	928
COD	39	93	74	67	43	67	41	41	4	52	67	56	31	31	190	74
Phenols	25	108	12	3	33	15	12	8	61	27	18	88	39	23	18	8
Oils	12	9	6	9	1	10	32	12	13	7	8	9	9	8	2	30
Chloride	112	90	91	96	129	76	34	35	26	23	24	25	29	26	24	18
Sulfate	227	254	254	243	215	194	207	207	255	226	226	235	187	187	180	207
Arsenic	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.	D.T.

* Split Sample

D.T.: Below Detection Limits

Surface water samples Nos. 101-104 collected 4/21 - 4/23/80.

Initial water level
 Water level one hour
 after pumping

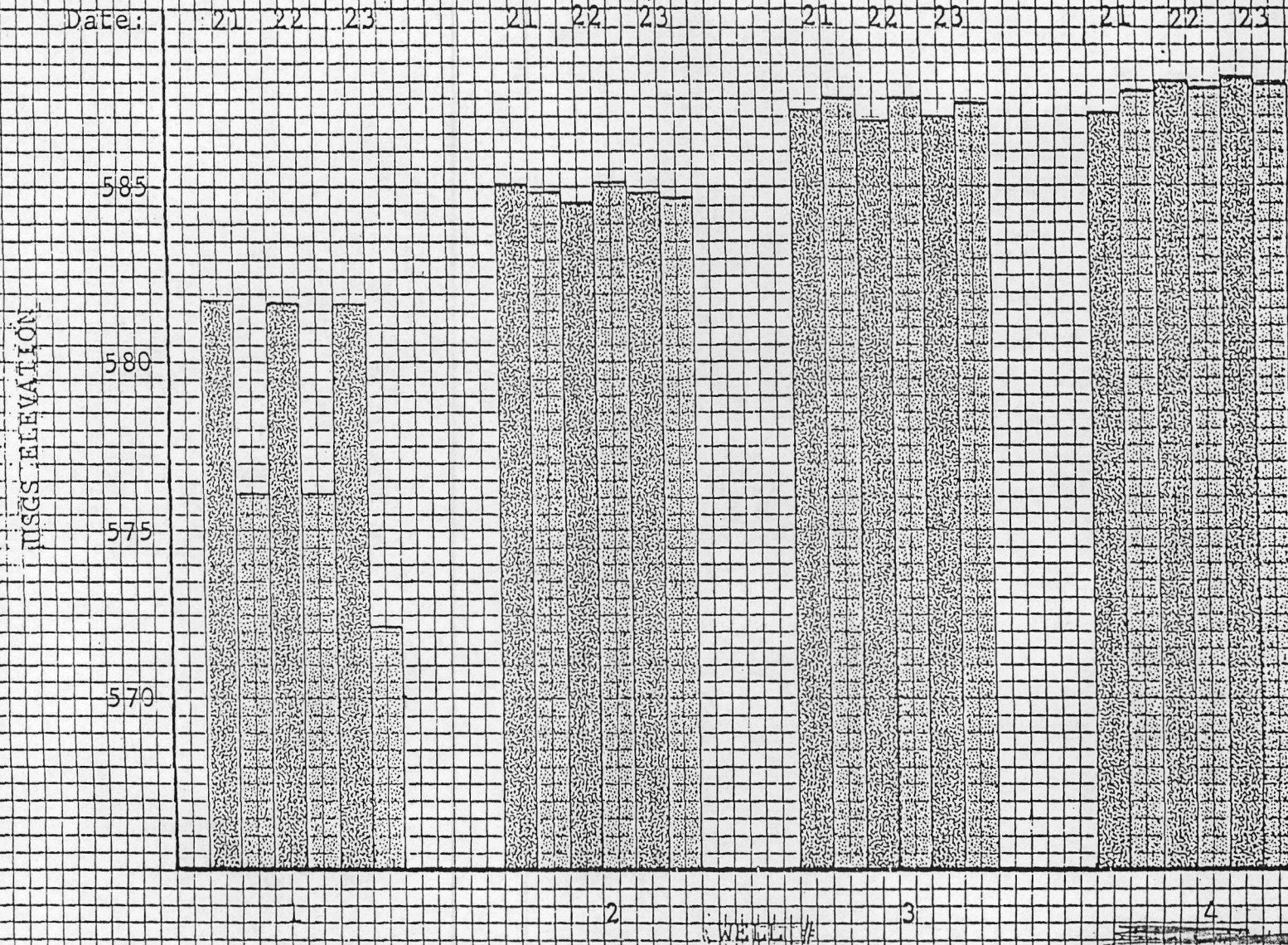


TABLE IV WELL WATER LEVELS

April 21-23, 1980

Attachment #6A



Union Oil of Calif
1650 E. Golf
Schaumburg
60196

CECO